

A Random Spattering



For use with: Arizona Wildlife Views Television Show, 07-08 Season, Episode 13

Adaptations; Culture; Persuasive Writing

Time Frame: 3-4 hours

Grade: 4-8

Overview:

This video could be considered a “Best of...” featuring segments from many of the Emmy-winning episodes. Students will have the opportunity to learn about some of the Native American beliefs about owls, experience some unique rattlesnake research, and fly with the California condors. As a culminating exercise, students will make a public service announcement focused on an important wildlife-related or outdoor recreation issue.

Essential Questions

- What factors influence an individual’s perceptions and opinions?
- What adaptations allow organisms to survive in harsh environments?
- What techniques do writers use to engage and persuade their audience?

Objectives

- Explain the importance of various physical and behavioral adaptations to rattlesnakes and condors.
- Analyze the origins of cultural beliefs surrounding owls.
- Develop a public service announcement focused on an important wildlife issue.

Arizona Department of Education Standards

Science

4 th grade	5 th grade	6 th grade	7 th grade	8 th grade
S4-C4-PO1				S4-C4-PO1
S4-C4-PO2				S4-C4-PO5

Writing

4 th grade	5 th grade	6 th grade	7 th grade	8 th grade
S3-C4-PO1	S3-C4-PO1	S3-C4-PO1	S3-C4-PO1	S3-C4-PO1

Listening and Speaking

4 th – 8 th grades
LS-E1

Viewing and Presenting

4 th – 8 th grades
VP-E2

Technology

4 th – 8 th grades
3T-E3-PO1
3T-E3-PO2
4T-E2-PO1
5T-E1-PO4

Materials and Resources

- Copy of Arizona Wildlife Views episode



Teacher Preparation

- Acquire a copy of the television show. You can check local listings to determine when it will air and record it directly. You may also check the Department’s web site to see if a copy can be downloaded or ordered.
- Write the vocabulary words and questions on the board.

Background Information:

This is not a lesson plan in the traditional sense. It does not provide step-by-step directions for completing an activity. Instead, it provides information to help you use an episode of the *Arizona Wildlife Views* television program in your classroom. It contains four suggested activities along with extensions and modifications. The first activity focuses on vocabulary. We have provided and defined some of the words used in the video. You are encouraged to use any appropriate strategies to introduce these to your students. Then, there is a series of comprehension questions that students can answer while watching the video. Answers (directly from the video) are provided in italics. Next, the critical thinking questions build on the major concepts introduced in the video. Students need to put a little bit more thought into these questions. Some reasonable answers are provided in italics. However, teachers should be cautious and realize that students may provide additional answers that can be supported with evidence. Finally, there is an in-depth activity. This activity allows students to evaluate and synthesize one or more of the concepts from the video, perhaps applying it to a new context or utilizing additional skills.

This episode originally aired on PBS (KAET Channel 8) in Phoenix on May 4, 2008. It may also be shown on regional PBS stations or other channels. For additional viewing information or download options, please visit <http://www.azgfd.gov/focuswild>.

Additional information about the animals featured in this episode can be found at:

- ✓ Arizona Wildlife Views:
<http://www.azgfd.gov/tv>
- ✓ California Condor Recovery:
http://www.azgfd.gov/w_c/california_condor.shtml
- ✓ Childs-Irving Decommissioning Info:
<http://www.aps.com/aps/CI/Default.html>
- ✓ Phoenix Herpetological Society:
<http://www.phoenixherp.com/content/>

This video shows a portion of a segment about unique research being performed on rattlesnakes. There are 13 species of rattlesnakes found in Arizona. The Arizona Game and Fish Department has developed a poster featuring all 13 rattlesnake species found in Arizona and is available for free to teachers. To order the poster, and to see some ideas to use the poster in your classroom, visit:

http://www.azgfd.gov/i_e/ee/resources/posters/rattlesnake/snake_index.shtml

Relevant Vocabulary:

- Decommission – to remove from active service; to no longer use
- Husbandry – the care of captive animals
- Hydroelectric – producing electricity using running water
- Opportunistic – ability to take advantage of new resources or habitats
- Talons – long; hooked claws on the feet of birds
- Venerated – respected and revered

Comprehension Questions:

1. According to this episode, how many Emmys has the Arizona Wildlife Views television show won? *Answer: 15.*
2. What was the name of the program that received the first Emmy? *Answer: Access is shrinking, a public service announcement.*
3. How many Emmys did the Department win in 2005? *Answer: 6.*
4. Which owl is known as “Watcher of the Dark” to the Hopi? *Answer: Burrowing owl.*
5. According to at least one Native American tribe, which owl did the brave and virtuous become after death? *Answer: Great-horned owl.*
6. Which owl did the wicked become? *Answer: Barn owl.*
7. What is the largest flying land bird in North America? What is its wingspan? *Answer: California condor with a wingspan of nearly 10 feet.*
8. What were the names of Arizona’s first commercial hydroelectric power plants? *Answer: Irving and Childs power plants.*

9. What are loreal pits? *Answer: Organs on some snakes that allow them to detect heat released by other animals.*
10. How many reptiles are currently cared for by the Phoenix Herpetological Society? *Answer: About 400.*

Critical Thinking Questions:

1. Owls are viewed very differently by various cultures. In some, they are evil while others view them as good. In some they are wise while others see them as foolish. In your opinion, why are owls portrayed in such contradictory ways? *Answer: Owls have many unique characteristics. As a result, people begin to think of explanations for these traits. For example, most owls are nocturnal. Since this is different from our normal experience, we want to try to explain it. Culture plays a large part in these explanations. Thus, some cultures may believe that it is evil and cannot face the light of day, while others may feel that it is a guardian of our dreams. Of course, these examples are made up and used only to illustrate the point.*
2. Why do you believe condors have bald heads? *Answer: Condors, along with all vultures, are scavengers. They eat dead organisms. The lack of feathers on the head is an adaptation that has developed to prevent disease. Dead animals tend to attract parasites and bacteria. If the bird had feathers on its head, these microorganisms could "crawl" under the feathers and infect the condor.*
3. Since poor weather does not appear to be a factor in the Southwestern deserts, why do you believe rattlesnakes use dens? *Answer: It may be that snakes as a larger group evolved that behavior and enough time has not passed for the desert snakes to lose that adaptation. It may be there is not enough food for the snakes. Perhaps their prey source becomes inactive. If the snakes want to survive through the winter, they may need to develop a similar adaptation. Like all of the Critical Thinking questions, these*

are just examples of some answers. Your students may have different, but just as valid, thoughts.

In-Depth Activity: The More You Know

PSAs, or public service announcements, are short advertising pieces designed to focus on a particular important idea of which the public should be aware. You may have seen PSAs on your favorite television channel, perhaps with a famous celebrity talking about the importance of reading, staying in school, or refusing drugs and cigarettes. To see some examples of other organizations that have created PSAs, visit:

- <http://www.redcross.org/press/psa/psa.html>
- <http://www.epa.gov/newsroom/psa.htm>

As this video mentioned, the Arizona Game and Fish Department won an Emmy for a PSA it developed about public access to lands. This is one of the many important ideas about which the Department is trying to inform people.

You are going to be responsible for producing your own PSA for the Department. Use the Internet or other resources to research the following issues. Choose one to be the topic of your PSA.

- Wearing life jackets, or personal floatation devices, while boating.
- Cleaning your boat to prevent the spread of zebra mussels and other invasive species.
- Using non-lead ammunition to prevent endangered condors from dying of lead poisoning.
- Not feeding wild animals.
- Staying on trails while driving ATVs and other off-highway vehicles.
- Participating in outdoor recreation activities.

Once you have selected your topic, plan your PSA. What language will you use to persuade your audience? What images will you select to send your message? Develop your PSA. Of

course, you can use whatever technology you have available to you. If you have access to a video camera, consider developing your own short (30 second) video PSA. However, if that is not possible there are other options, such as a PowerPoint presentation using images and video from the Internet, a poster, or even an

audio recording that could be played on the radio.

Share your PSA with your classmates. If appropriate, consider using the Internet to share it with the world.

Differentiated Instruction:

Extensions:

- **Geography:** The video mentioned that many of the fish released into Arizona's urban lakes come from Waldenburg, Arkansas. Pretend you are responsible for getting the fish to Arizona. Using a road map, locate Waldenburg and Phoenix. Plan your route. Which roads would you take? How many miles would you travel? If you averaged 60 miles per hour, how many hours would the trip take you? If you could only drive 8 hours per day, how many days would it take?
- **Social Studies:** There are many superstitions and cultural beliefs about owls. However, they are not the only animal that has them. Choose an animal commonly found around your school. Research the beliefs that other cultures have about this animal.

Modifications:

- Create a student handout with the vocabulary words and questions already provided.
- Provide students with the definitions and have them match them to the appropriate vocabulary words.
- Provide fill-in-the-blank responses for the Comprehension Questions, allowing students to listen for appropriate words to complete the sentences.



Reflection:

Use the space below to reflect on the success of the lesson. What worked? What didn't? These notes can be used to help the next time you teach the lesson. In addition, the Department would appreciate any feedback. Please visit <http://www.azgfd.gov/focuswild> and submit a lesson evaluation.